CPC COOPERATIVE PATENT CLASSIFICATION

G06G ANALOGUE COMPUTERS (analogue optical computing devices G06E 3/00)

G06G 1/00 **Hand manipulated computing devices** (planimeters G01B 5/26)

G06G 1/0005	.	{characterised by a specific application}
G06G 1/001	. .	{for medical purposes, for biological purposes}
G06G 1/0015	. .	{for computing periodic phenomena e.g. fertility periods}
G06G 1/0021	. .	{for civil engineering}
G06G 1/0026	. .	{for machining}
G06G 1/0031	. .	{for hydraulics}
G06G 1/0036	. .	{for electricity, for electronics}
G06G 1/0042	. .	{for optics, for photography}
G06G 1/0047	. .	{for printing}
G06G 1/0052	. .	{for air navigation or sea navigation}
G06G 1/0057	. .	{for gun laying, for bomb aiming}
G06G 1/0063	. .	{for calculating fuel consumption}
G06G 1/0068	. .	{for conversion from one unit system to another, e.g. from British to metric}
G06G 1/0073	. .	{for commerce, bank or invoicing}
G06G 1/0078	. . .	{for calculating interests}
G06G 1/0084	. . .	{for calculating earned incomes}
G06G 1/0089	. . .	{for calculating taxes}
G06G 1/0094	. .	{for trigonometric computations}

G06G 1/02 . Devices in which computing is effected by adding, substracting, or comparing lengths of parallel or concentric grauduated scales {(G06G 1/0005 takes precedence)}

G06G 1/025	. .	{decimal point positioning devices}
G06G 1/04	. .	characterised by construction (G06G 1/10 takes precedence)
G06G 1/045	. . .	{with scales borne by bands}
G06G 1/06	. . .	with rectilinear scales, e.g. slide rule
G06G 1/065	. . . .	{construction of the cursor}
G06G 1/08	. . .	with circular or helical scales
G06G 1/085	. . . .	{borne by a cylinder}
G06G 1/10	. .	characterised by the graduation
G06G 1/105	. . .	{linear graduations}
G06G 1/12	. . .	Logarithmic graduations, e.g. for multiplication

G06G 1/14 . in which a straight or curved line has to be drawn from given points on one or more input scales to one or more points on a result scale

G06G 1/16	.	in which a straight or curved line has to be drawn through related points on one or more families of curves

G06G 3/00   **Devices in which the computing operation is performed mechanically** (G06G 1/00 takes precedence)

G06G 3/02	.	for performing additions or subtractions, e.g. differential gearing
G06G 3/04	.	for performing multiplication or divisions, e.g. variable-ratio gearing
G06G 3/06	.	for evaluating functions by using cams and cam followers
G06G 3/08	.	for integrating or differentiating, e.g. by wheel and disc
G06G 3/10	.	for simulating specific processes, systems, or devices

G06G 5/00   **Devices in which the computing operation is performed by means of fluid-pressure elements** (such elements in general F15C)

G06G 7/00   **Devices in which the computing operation is performed by varying electric or magnetic quantities**

G06G 7/02	.	Details not covered by G06G 7/04 to G06G 7/10, {e.g. monitoring, construction, maintenance}
G06G 7/04	.	input or output devices (graph readers G06K 11/00; function plotters, co-ordinate plotters G06K 15/22, {G09G 3/001})
G06G 7/06	.	Programming arrangements, e.g. plugboard for interconnecting functional units of the computer; Digital programming {hybrid computers G06J}
G06G 7/10	.	Power supply arrangements
G06G 7/12	.	Arrangements for performing computing operations, e.g. operational amplifiers (amplifiers in general H03F; {adapted for telemeasuring or for indicating or recording the results of the measurement G01D 1/10, G01D 1/16; for fuzzy computing G06N 7/02})
G06G 7/122	. .	for optimisation, e.g. least square fitting, linear programming, critical path analysis, gradient method
G06G 7/14	. .	for addition or subtraction (of vector quantities G06G 7/22){computing the average by addition; differential amplifiers H03F 3/45}
G06G 7/16	. .	for multiplication or division {G06G 7/19 and G06G 7/24 take precedence measuring electric power G01R 21/00}
G06G 7/161	. . .	with pulse modulation, e.g. modulation of amplitude, width, frequency, phase or form {pulse modulators H03K 7/00}
G06G 7/162	. . .	using galvano- magnetic effects, e.g. Hall effect; using similar magnetic effects
G06G 7/163	. . .	using a variable impedance controlled by one of the input signals, variable amplification or transfer function {G06G 7/161, G06G 7/162 take precedence}
G06G 7/164	. . .	using means for evaluating powers, e.g. quarter square multiplier (evaluating

powers <u>G06G 7/20</u>)

G06G 7/18	. .	for integration or differentiation; for forming integrals (<u>G06G 7/19</u> takes precedence)
G06G 7/1806	. . .	{with respect to a variable other than time}
G06G 7/1813	. . .	{using electrochemical elements, e.g. solion}
G06G 7/182	. . .	using magnetic elements
G06G 7/184	. . .	using capacitative elements
G06G 7/186	. . . .	using an operational amplifier comprising a capacitor or a resistor in the feedback loop
G06G 7/1865	. . . . .	{with initial condition setting}
G06G 7/188	. . .	using electromechanical elements
G06G 7/19	. .	for forming integrals of products, e.g. Fourier integrals, Laplace integrals, correlation integrals; for analysis or synthesis of functions using orthogonal functions (Fourier or spectrum analysis <u>G01R 23/16</u>; sound analysis or synthesis <u>G10L</u>)
G06G 7/1907	. . .	{using charge transfer devices}
G06G 7/1914	. . .	{using a magnetic medium, a linear filter}
G06G 7/1921	. . .	{for forming Fourier integrals, harmonic analysis and synthesis (spectrum analysis <u>G01R 23/00</u>; **G01R 7/195** and **G01R 7/19C** take precedence)}
G06G 7/1928	. . .	{for forming correlation integrals; for forming convolution integrals (<u>G06G 7/195</u>, <u>G06G 7/1907</u> and <u>G06G 7/1914</u> take precedence)}
G06G 7/1935	. . . .	{by converting at least one the input signals into a two level signal, e.g. polarity correlators}
G06G 7/1942	. . .	{for forming other integrals of product, e.g. orthogonal functions, Laplace, Laguerre, Walsh, Hadamard, Hilbert (<u>G06G 7/195</u>, <u>G06G 7/1907</u> and <u>G06G 7/1914</u> take precedence)}
G06G 7/195	. . .	using electro- acoustic elements
G06G 7/20	. .	for evaluating powers, roots, polynomes, mean square values, standard deviation (<u>G06G 7/122</u>, <u>G06G 7/28</u> take precedence; gamma correction in television systems <u>H04N 5/20</u>, <u>H04N 9/69</u>)
G06G 7/22	. .	for evaluating trigonometric functions; for conversion of co-ordinates; for computations involving vector quantities (trigonometric computations using simultaneous equations <u>G06G 7/34</u>{ for computations in the complex plane; <u>G06G 7/20</u>, <u>G06G 7/28</u> take precedence; resolvers 74C5A1})
G06G 7/24	. .	for evaluating logarithmic or exponential functions, e.g. hyperbolic functions {for multiplication, division or for evaluating powers or roots using logarithmic functions; gamma correction in television systems <u>H04N 5/20</u>, <u>H04N 9/69</u>}
G06G 7/25	. .	for discontinuous functions, e.g. backlash, dead zone, limiting absolute value or peak value {measuring the maximum value of currents or voltages <u>G01R 19/30</u>}
G06G 7/26	. .	Arbitrary function generators {using Fourier series or other orthogonal functions <u>G06G 7/19</u>; using curve followers <u>G06K 11/02</u>}
G06G 7/28	. . .	for synthesising functions by piece-wise approximation
G06G 7/30	. .	for interpolation or extrapolation (<u>G06G 7/122</u> takes precedence)
G06G 7/32	. .	for solving of equations {or inequations; for matrices}
G06G 7/34	. . .	of simultaneous equations (<u>G06G 7/122</u> takes precedence)
G06G 7/36	. . .	of single equations of quadratic or higher degree (<u>G06G 7/22</u>, <u>G06G 7/24</u> take precedence)
G06G 7/38	. . .	of differential or integral equations

G06G 7/40	. . . .	of partial differential equations {of field or wave equations}(simulating specific devices G06G 7/48)
G06G 7/42	. . . . .	using electrolytic tank
G06G 7/44	. . . . .	using continuous medium, current-sensitive paper
G06G 7/46	. . . . .	using discontinuous medium, e.g. resistance network
G06G 7/48	.	Analogue computers for specific processes, systems or devices, e.g. simulators
G06G 7/485	. .	{for determining the trajectory of particles, e.g. of electrons (measurement performed on radiation beams G01T 1/29; processing or analysing tracks of particles G01T 5/02)}
G06G 7/50	. .	for distribution networks, e.g. for fluids (G06G 7/62 takes precedence)
G06G 7/52	. .	for economic systems; for statistics (G06G 7/122, G06G 7/19 take precedence)
G06G 7/54	. .	for nuclear physics, e.g. nuclear reactors, radioactive fall {(processing of scintigraphic or other radio-isotope data G01T 1/1647, G01T 1/2992)}
G06G 7/56	. .	for heat flow (G06G 7/58 takes precedence)
G06G 7/57	. .	for fluid flow (G06G 7/50 takes precedence); { for distribution networks}
G06G 7/58	. .	for chemical processes (G06G 7/75 takes precedence); { for physico-chemical processes; for metallurgical processes}
G06G 7/60	. .	for living beings, e.g. their nervous systems; { for problems in the medical field}
G06G 7/62	. .	for electric systems or apparatus {(G06G 7/78 takes precedence)}

NOTE

> This group covers only computers specially adapted for electronic systems or devices

G06G 7/625	. . .	for filters; for delay lines ({ measuring characteristics of electric networks, e.g. plotting Nyquist diagram G01R 27/28})
G06G 7/63	. . .	for power apparatus, e.g. motors, or supply distribution networks {(for control systems of electric power apparatus G06G 7/66)}
G06G 7/635	. . . .	for determining the most economical distribution in power systems
G06G 7/64	. .	for non-electric machines, e.g. turbine
G06G 7/66	. .	for control systems {(for optimisation G06G 7/122)}
G06G 7/68	. .	for civil engineering structures, e.g. beam, strut, girder, { elasticity computation}
G06G 7/70	. .	for vehicles, e.g. to determine permissible loading of ships, { centre of gravity, necessary fuel}
G06G 7/72	. . .	Flight simulator (link trainers G09B 9/00)
G06G 7/75	. .	for component analysis, e.g. of mixtures, of colours (G06G 7/122 takes precedence; { gas chromatography G01N 30/00})
G06G 7/76	. .	for traffic
G06G 7/78	. .	for direction-finding, locating, distance or velocity measuring, or navigation systems
G06G 7/80	. .	for gunlaying; for bomb aiming; for guiding missiles
G06G 99/00		**Subject matter not provided for in other groups of this subclass**